In the Claims

1. (Previously Presented) A method for providing optical alignment for a visible wavelength reflective system, comprising:

positioning a first mirror blank on a lathe fixture, the first mirror blank comprising a single precision pinhole;

securing the first mirror blank to the lathe fixture; ~~and~~

generating a first mirror from the first mirror blank; and

the first mirror comprising a tolerance stack-up associated with the lathe fixture of less than 6.0 microns in a single direction.

2. (Canceled)

3. (Original) The method of Claim 1, the first mirror comprising a tolerance stack-up associated with the lathe fixture of approximately 0.5 microns in a single direction.

4. (Previously Presented) A method for providing optical alignment for a visible wavelength reflective system, comprising:

positioning a first mirror blank on a lathe fixture, the first mirror blank comprising a single precision pinhole;

securing the first mirror blank to the lathe fixture;

generating a first mirror from the first mirror blank;

positioning a second mirror blank on the lathe fixture, the second mirror blank comprising a single precision pinhole;

securing the second mirror blank to the lathe fixture; and

generating a second mirror from the second mirror blank.

5. (Original) The method of Claim 4, further comprising:

positioning the first mirror on an assembly housing, the first mirror comprising a single precision pinhole;

securing the first mirror to the assembly housing;

positioning the second mirror on the assembly housing, the second mirror comprising a single precision pinhole; and

securing the second mirror to the assembly housing.

6. (Original) The method of Claim 5, the first mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.5 microns in a single direction, and the second mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.0 microns in a single direction.

7. (Original) The method of Claim 5, the first mirror comprising a tolerance stack-up associated with the assembly housing of approximately 2.0 microns in a single direction, and the second mirror comprising a tolerance stack-up associated with the assembly housing of approximately 2.0 microns in a single direction.

8. (Previously Presented) A method for providing optical alignment for a visible wavelength reflective system, comprising:

positioning a first mirror on an assembly housing, the first mirror comprising a single precision pinhole;

securing the first mirror to the assembly housing;

positioning a second mirror on the assembly housing, the second mirror comprising a single precision pinhole;

securing the second mirror to the assembly housing; and

the first mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.5 microns in a single direction, and the second mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.0 microns in a single direction.

9. (Canceled)

10. (Original) The method of Claim 8, the first mirror comprising a tolerance stack-up associated with the assembly housing of approximately 2.0 microns in a single direction, and the second mirror comprising a tolerance stack-up associated with the assembly housing of approximately 2.0 microns in a single direction.

11. (Previously Presented) A system for providing optical alignment for a visible wavelength reflective system, comprising:

a lathe fixture operable to be received in a lathe, the lathe fixture comprising a single precision pin, the single precision pin aligned with an optical axis for the lathe when the lathe fixture is received in the lathe;

a mirror blank operable to be secured to the lathe fixture, the mirror blank comprising a single precision pinhole, the single precision pinhole aligned with the single precision pin; and

the mirror blank comprising bolt holes, the mirror blank operable to be secured to the lathe fixture through the bolt holes.

12. (Canceled)

13. (Original) The system of Claim 11, the lathe operable to generate a mirror from the mirror blank, the mirror comprising a single precision pinhole.

14. (Original) The system of Claim 13, the mirror comprising a tolerance stack-up associated with the lathe fixture of less than 6.5 microns in a single direction.

15. (Original) The system of Claim 13, the mirror comprising a tolerance stack-up associated with the lathe fixture of less than 6.0 microns in a single direction.

16. (Original) The system of Claim 13, the mirror comprising a tolerance stack-up associated with the lathe fixture of approximately 0.5 microns in a single direction.

17. (Previously Presented) An assembly housing for a visible wavelength reflective system, comprising:

a primary mirror comprising a single precision pinhole, the single precision pinhole aligned with an optical axis of the assembly housing;

a secondary mirror comprising a single precision pinhole, the single precision pinhole aligned with the optical axis of the assembly housing; and

the primary mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.5 microns in a single direction, and the secondary mirror comprising a

tolerance stack-up associated with the assembly housing of less than 6.0 microns in a single direction.

18. (Canceled)

19. (Original) The assembly housing of Claim 17, the primary mirror comprising a tolerance stack-up associated with the assembly housing of approximately 2.0 microns in a single direction, and the secondary mirror comprising a tolerance stack-up associated with the assembly housing of approximately 2.0 microns in a single direction.

20. (Original) The assembly housing of Claim 17, the primary and secondary mirrors each comprising bolt holes, the primary and secondary mirrors operable to be secured to the assembly housing through the bolt holes.

21. (Previously Presented) The method of Claim 1, further comprising:

positioning a second mirror blank on the lathe fixture, the second mirror blank comprising a single precision pinhole;

securing the second mirror blank to the lathe fixture; and

generating a second mirror from the second mirror blank.

22. (Previously Presented) The method of Claim 21, further comprising:

positioning the first mirror on an assembly housing, the first mirror comprising a single precision pinhole;

securing the first mirror to the assembly housing;

positioning the second mirror on the assembly housing, the second mirror comprising a single precision pinhole; and

securing the second mirror to the assembly housing.

23. (Previously Presented) The method of Claim 22, the first mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.5 microns in a single direction, and the second mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.0 microns in a single direction.

24. (Previously Presented) The method of Claim 22, the first mirror comprising a tolerance stack-up associated with the assembly housing of approximately 2.0 microns in a single direction, and the second mirror comprising a tolerance stack-up associated with the assembly housing of approximately 2.0 microns in a single direction.

25. (Previously Presented) A system for providing optical alignment for a visible wavelength reflective system, comprising:

a lathe fixture operable to be received in a lathe, the lathe fixture comprising a single precision pin, the single precision pin aligned with an optical axis for the lathe when the lathe fixture is received in the lathe;

a mirror blank operable to be secured to the lathe fixture, the mirror blank comprising a single precision pinhole, the single precision pinhole aligned with the single precision pin; and

the lathe operable to generate a mirror from the mirror blank, the mirror comprising a single precision pinhole.

26. (Previously Presented) The system of Claim 25, the mirror comprising a tolerance stack-up associated with the lathe fixture of less than 6.5 microns in a single direction.

27. (Previously Presented) The system of Claim 25, the mirror comprising a tolerance stack-up associated with the lathe fixture of less than 6.0 microns in a single direction.

28. (Previously Presented) The system of Claim 25, the mirror comprising a tolerance stack-up associated with the lathe fixture of approximately 0.5 microns in a single direction.

29. (Previously Presented) A method for providing optical alignment for a visible wavelength reflective system, including comprising a first and second mirror comprising:

positioning the first mirror on an assembly housing, the first mirror formed with a first precision pinhole;

securing the first mirror to the assembly housing through the first precision pinhole;

positioning the second mirror on the assembly housing, the second mirror formed with a second precision pinhole;

securing the second mirror to the assembly housing through the second precision pinhole; and

wherein the first precision pinhole and the second precision pinhole lie along the optical axis of the reflective system.

30. (Canceled)

31. (Currently Amended) A method for providing optical alignment for a visible wavelength reflective system, comprising: ~~A method of Claim 30, further comprising:~~

positioning a first mirror blank on a lathe fixture having an axis of rotation, the first mirror blank comprising a single precision pinhole aligned with an axis of rotation of the lathe;

securing the first mirror blank to the lathe fixture;

generating a first mirror from the first mirror blank;

positioning a second mirror blank on the lathe fixture, the second mirror blank comprising a single precision pinhole aligned with the axis of rotation of the lathe;

securing the second mirror blank to the lathe fixture; and

generating a second mirror from the second mirror blank.

32. (Previously Presented) A method for providing optical alignment for a visible wavelength reflective system, comprising:

positioning a first mirror on an assembly housing, the first mirror comprising a single precision pinhole;

securing the first mirror to the assembly housing;

positioning a second mirror on the assembly housing, the second mirror comprising a precision pinhole;

securing the second mirror to the assembly housing; and

wherein the precision pinholes in the first and second mirrors are aligned along an optical axis of the reflective system.

33. (Previously Presented) A system for providing optical alignment for a visible wavelength reflective system, comprising:

a lathe fixture operable to be received in a lathe, the lathe fixture comprising a single precision pin, the single precision pin aligned with an optical axis for the lathe when the lathe fixture is received in the lathe; and

a mirror blank operable to be secured to the lathe fixture, the mirror blank comprising a single precision pinhole, the single precision pinhole aligned with the single precision pin.

34. (Previously Presented) An assembly housing for a visible wavelength reflective system, comprising:

a primary mirror comprising a single precision pinhole, the single precision pinhole aligned with an optical axis of the assembly housing; and

a secondary mirror comprising a single precision pinhole, the single precision pinhole aligned with the optical axis of the assembly housing.